

Removing Barriers for Implementation of Evidence Based Practices

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Accessing Today's Supporting Resources

- There are several resources that are being shared with you through a Google Folder.
- Access this link: [Removing Barriers for Implementing EBPs](#)

Outcomes

- Define the components of a Barrier Removal Process
- Provide an example of a district's Barrier Removal Process
- Describe the most common barriers for implementing reading evidence-based practices
- Provide an overview of Scientifically Valid Reading Practices
- Outline suggestions for addressing the barriers

Common Reading EBP Implementation Barriers

1. Insufficient understanding of scientifically-valid reading practices
2. Curriculum resources do not support scientifically valid-reading practices
3. Insufficient administrative support and monitoring to ensure curriculum resource materials that are supportive of scientifically-valid reading practices are being taught as intended on a daily basis
4. Insufficient understanding of assessments and how to act on assessment data to inform instruction
5. Insufficient infrastructure (system) to support teachers in preventing and addressing reading difficulties across grade levels

1.0 Barrier Removal Process

Connection to Communication

- Effectively communicating the barrier is the first step in being able to address the barrier
- Linking communication protocols between the district team, central office and principal leaders, and various school groups / teams will help identify the barriers

Barrier Removal Process

- Outlines a series of steps that need to be done from the point in which a District Implementation Team is made aware of a barrier to the point in which it has been confirmed the barrier has been removed

Critical Steps to Document

- Venue in which barriers are openly discussed
- Mechanism to record barriers and which step of the process the barrier currently exists
- DIT designee who will be responsible to communicate the barrier and circumstances surrounding the barrier to the pre-determined people with the appropriate level of decision making authority to remove the barrier
- Documentation of the actions that will be taken with corresponding timelines to address the barrier

Critical Steps to Document (cont.)

- Venue to provide status updates for addressing / removing barriers to the District Implementation Team (e.g., monthly meetings at the end of each meeting)
- After the barrier has seemingly been removed, process for how to check-in with the group / team raising the barrier to determine if the way it was removed is still effective

Identifying Decision-Makers

- After the steps outlining the process, list the decision types and the district personnel that can make the decisions
 - The District Implementation Team (DIT) assigns a designee responsible for speaking with the decision-makers since they may or may not be a DIT member

Activity 1.1

- **Access the documents in the Google Drive titled, “District Barrier Removal Process” and “District Pre-Meeting Sheet and Barrier Log.”**
 - **Review the steps outlined in the district’s process and the way their barrier log is organized.**
- **What are some steps you can take following today to create and / or refine you district’s Barrier Removal process?**

2.0 Common Reading Implementation Barriers

Barrier 1: Insufficient understanding of scientifically-valid reading practices

Solutions to Barrier 1

- Provide principals and staff (e.g., teachers, para-educators) on-going professional learning in scientifically-valid reading practices
- Safeguard against conflicting messages (e.g., sending staff to conferences or to hear speakers that describe scientifically-invalid reading practices, use of curriculum resources that promote invalid practices)

Simple View of Reading: Defining Domains



- Decoding (word-level reading): ability to transform print into spoken language
- Language Comprehension: ability to understand spoken language

Ohio's Plan to Raise Literacy Achievement

Scientifically **Valid** Reading Practices

- Decoding skills as outlined in the Simple View of Reading (print concepts, phonemic skills, word knowledge: sight vocabulary, fluency) need to be explicitly taught
- Decodable text (controlled text) must be used when students are learning phonics and word recognition skills so they have opportunities to apply learned phonics skills to connected text
- Language comprehension skills (background knowledge, academic vocabulary, narrative language skills, and inferential language skills) need to be explicitly taught

Scientifically **Valid** Reading Practices (cont.)

- Leveled readers and other rich vocabulary texts should be used to improve the language comprehension skills
- Recommendation is until a child can read at a third-grade level,(s)he should not be asked to learn to apply phonics and word recognition skills to leveled text because the text includes phonics skills and high-frequency words that have not yet been taught

Scientifically **Invalid** Reading Practices

- Use of memorization, picture cues, contextual guessing for teaching word recognition (“three cueing systems”)
- Use of “picture walks” before students read stories for the purposes of giving them assistance in being able to use the pictures to aid in reading words they may not know in print

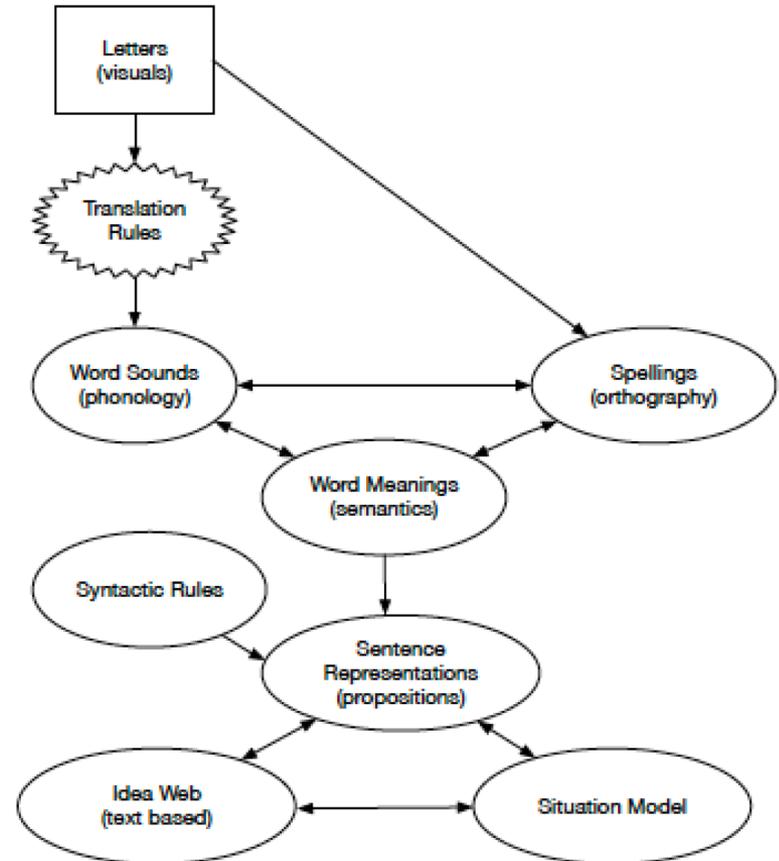
Reading: Explaining this Complex Skill

What happens in your mind when you read a passage like this?

Reading Passage: “Never shall I forget that night, the first night in camp, which has turned my life into one long night, seven times cursed and seven times sealed.” – Night by: Elie Wiesel

Mental Processes Used to Read

- Two paths
- Both are accessible at all times



Willingham, 2017

Where to Begin

- Writing: We read what is written
- Purpose of writing:
 - Extension and expansion of memory (more objective than memory)
 - Started as an accounting system
- Cannot have a writing system that is based on symbols
- Grammar needs to also be considered

Willingham, 2017

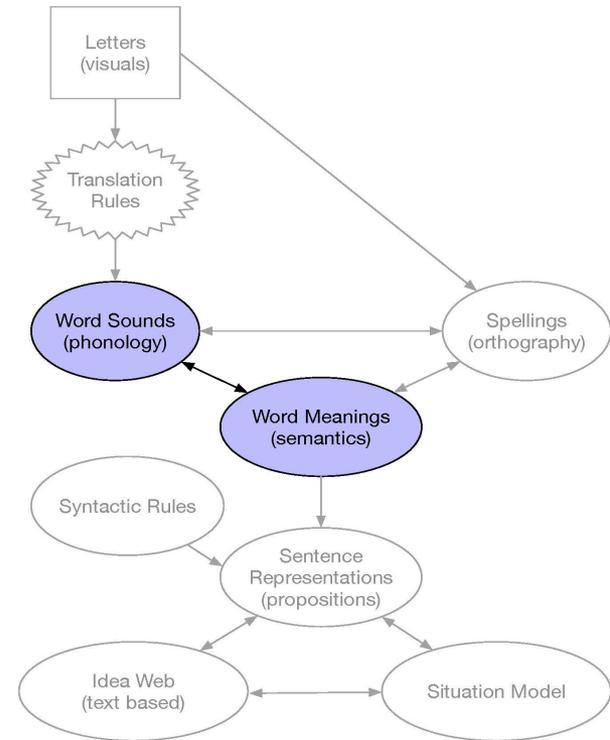
Grammar: Effortless Learning

- Children effortlessly learn grammar when they learn to talk
- Grammar rules do not need to be drilled into children's minds – very few adults can describe all grammar rules
- We use grammar rules with limited awareness of how we do it

Willingham, 2017

Understanding the Role of Spoken Language

- Born with ability to understand spoken language with ease
- Understand the sound of a word (**phonology**) – “car” and its meaning (**semantics**)
- Instruction is not really needed in arrangement of words and phrases to form complete sentences

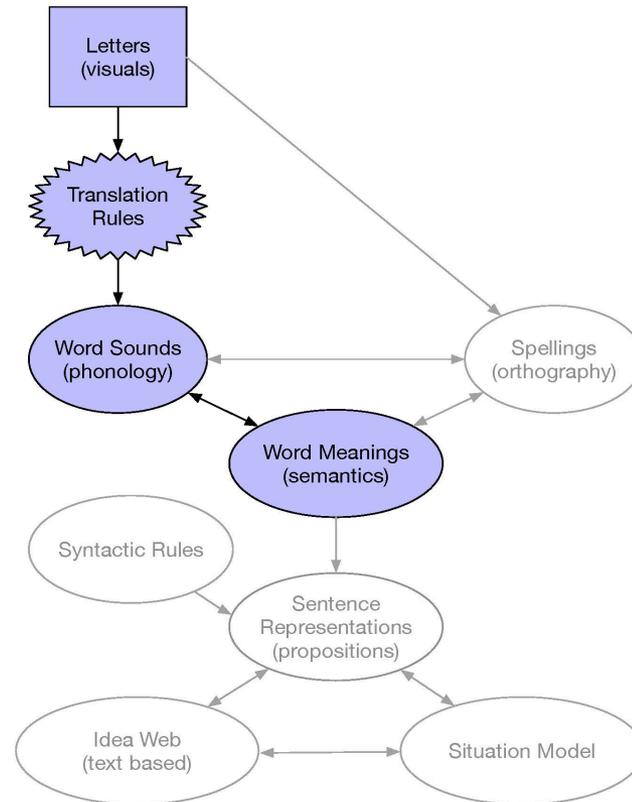


Willingham, 2017

Reading is built upon the relationship that exists between sound and meaning. It adds processes for translating letters written on the page to sound representations.

Willingham, 2017

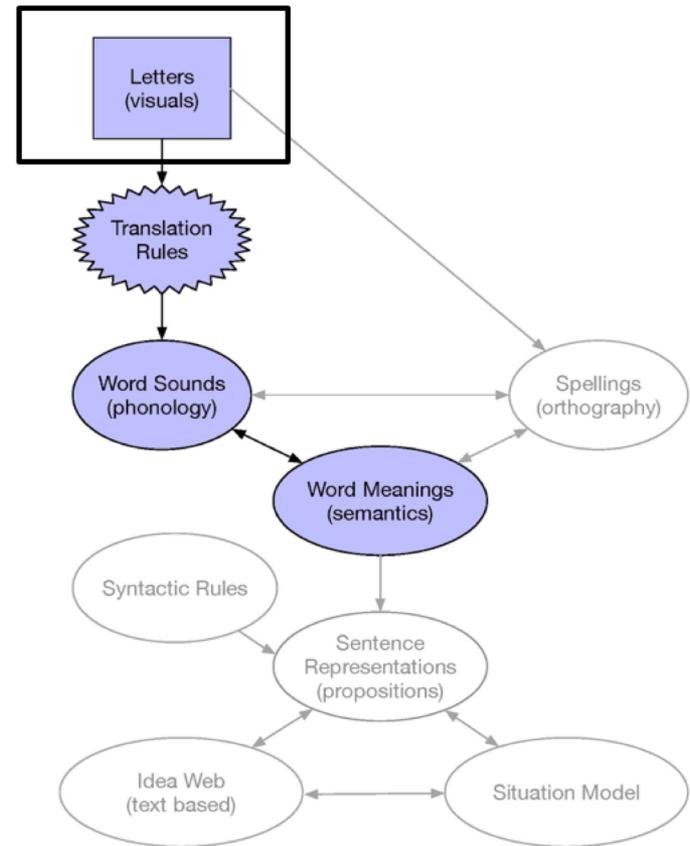
Path to Meaning: Pathway 1



Willingham, 2017

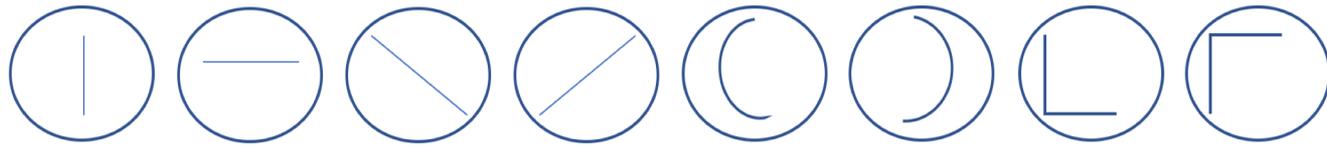
Step 1: Visually Distinguishing Letters

- Most common letter shapes match the shapes that are frequently encountered in our environment
- Shapes of letters are often confusable to children when they learn to read
- This should not be made to be a larger problem than it is since there are only 26 letters



Willingham, 2017

Letter Features

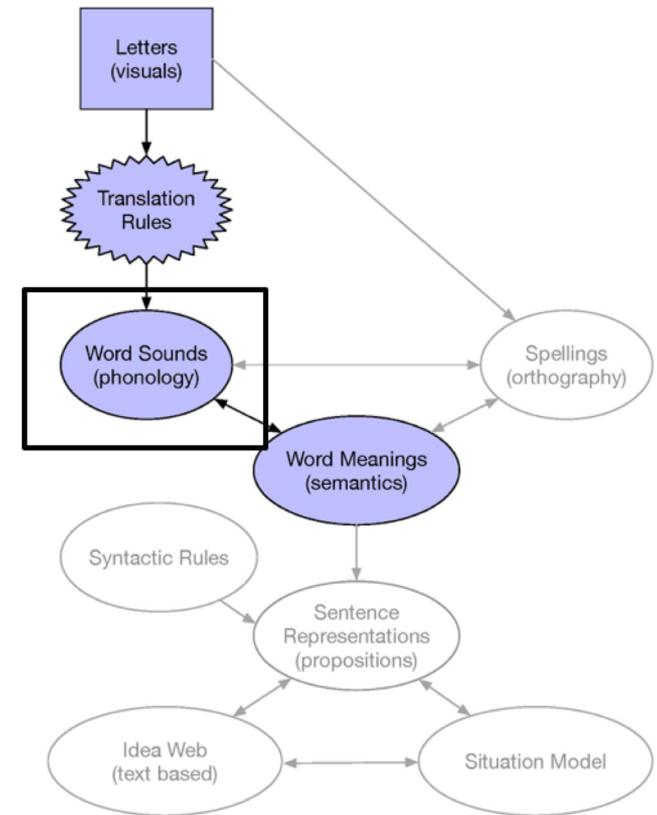


- Visual system evaluates the features of letters
- Based on the features networks activate in the mind to determine the corresponding letter
- This explains why changes in font or size don't seem to impact our ability to recognize letters
- Good and poor readers are more similar than different when it comes to distinguishing letters – this is not the case when it comes to hearing and associating sounds

Willingham, 2017

Step 2: Hear and Describe the Difference of Sounds Between Words

- People are not born with the ability to describe the differences between speech sounds
- Need to know which sounds are clustered together to form a word
- Greatest concern for reading because this ability is less likely to develop on its own
- A sound that is supposed to go with a letter depends on its position to neighboring sounds (mapping)



Willingham, 2017

Developing Word-Sound Knowledge

- Continuum of Skill Development:
 - Words are comprised of syllables:
 - Delete: (cow)boy – boy
 - Delete: (un)der – der
 - Words are comprised of onset-rime:
 - Delete: (c)at – at
 - Substitute: (n)ot – (h)ot
 - Words are comprised of individual sounds (phonemes):
 - Basic and advanced phoneme skills

Kilpatrick, 2017

“While phonemic awareness and letter-sound skills are equally important for mapping, phonemic awareness difficulties are more commonly the problem.” The vast majority of students with word recognition difficulties lack sufficient phoneme awareness. Students with problems in both struggle the most.”

Kilpatrick, 2017, p. 35

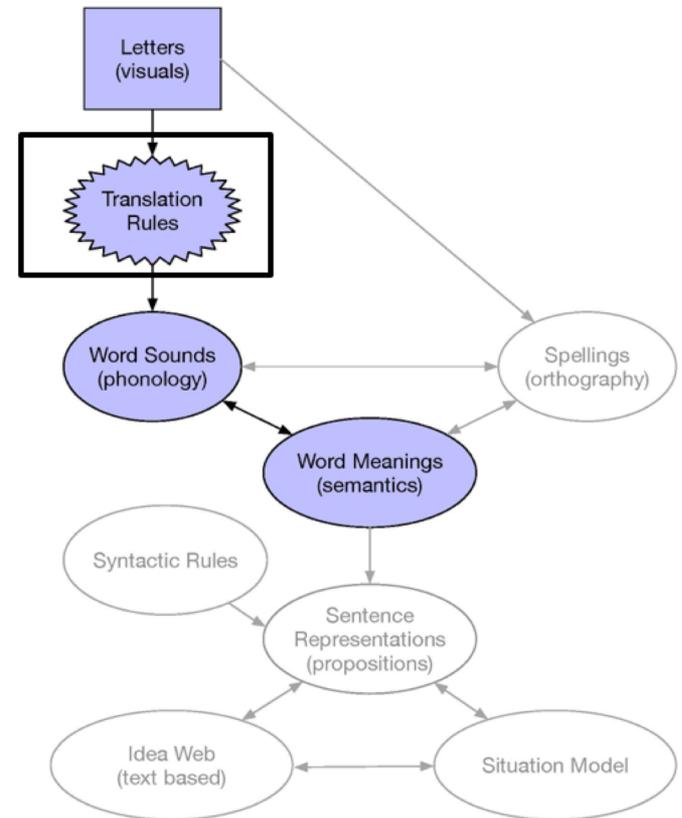
Basic and Advanced Word-Sound Skills

- Basic phoneme skills:
 - Delete: (p)lane – lane
 - Substitute: (c)lass – (g)lass
 - Delete: shee(p) – she
- Advanced phoneme skills:
 - Substitute: b(a)g – big
 - Delete: c(l)ub – cub
 - Substitute: pe(t) – pe(n)
 - Delete: be(s)t – bet
 - Substitute: li(f)t – li(s)t

Kilpatrick, 2017

Step 3: Translation Rules

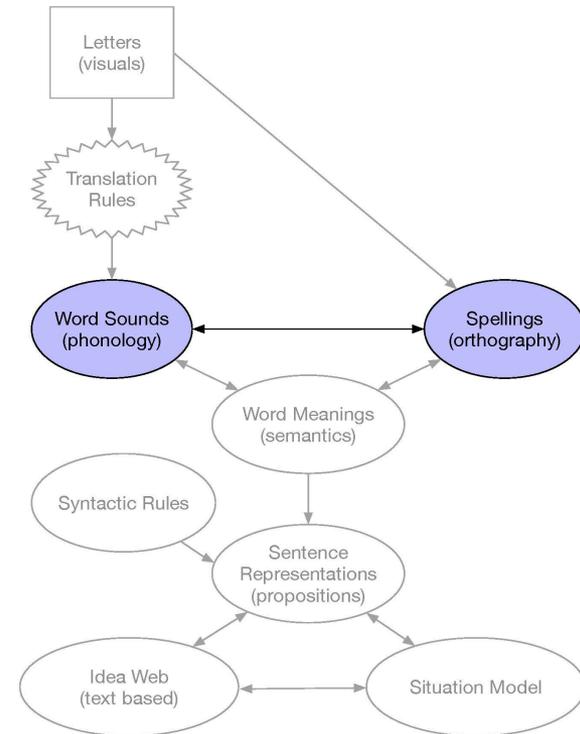
- Alphabetic principle: letters correspond to sounds
- Requires auditory (phonology) and visual pieces to be in place
- Mapping letters to sounds is confusing in the English language
- English uses a “many to many matching” - One letter or letter combination can signify many sounds (boat, row, doe)



Willingham, 2017

Step 4: Word Sounds and Spellings

- Written words are meaningful letter strings because the written letters match the order of sounds in spoken words
- Translation rules helped us match letters (individual letters, combinations, and clusters of letters) to words
- Meaningful strings of letters are anchored to memory because the reader recognizes why those letter strings are meaningful



Willingham, 2017

Word Sounds and Spellings (cont.)

- English has many homophones (knight, night)
- Spelling is something we need to pay attention to
- Orthographic representations develop through reading practice:
 - “Self-Teaching Hypothesis:” Occurs when students successfully sound out a new word while reading
 - While sounding out, students briefly interact with the sounds **and** letters of the given word
 - Promotes memory of the letter sequence (helps them map the words to permanent memory)

Kilpatrick, 2017

Reading Practice

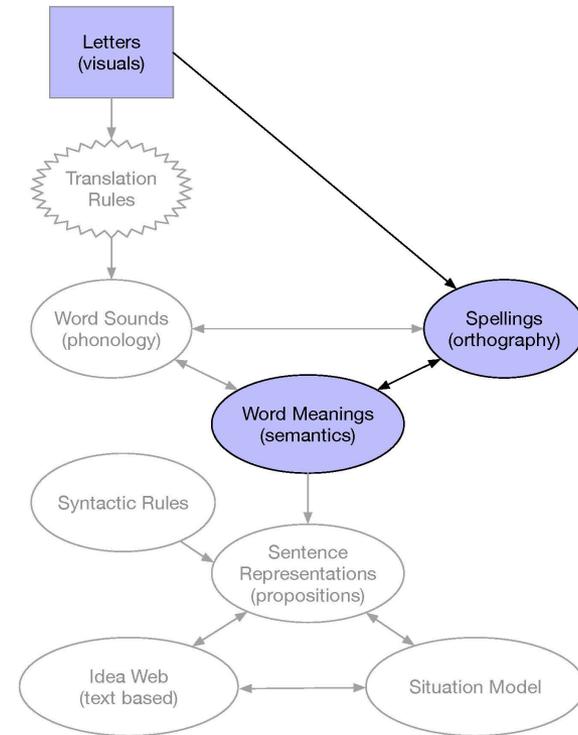
- Don't let the term “self-teaching” fool you!
 - Teachers must carefully plan the reading practice for the letter strings and translation rules so students can frequently interact with words that contain those letters and sounds
 - The use of decodable text (controlled text) is the kind of carefully designed practice students need to commit the letter sequences to memory (regular and irregular words) so any word they encounter they can read by sight (sight words)
 - Students need a minimum of 4-8 exposures

Reading Practice (cont.)

- Students reading below a third grade level do not have enough letter sequences committed to memory (orthographic mapping) and still need teaching with carefully designed practice of letter strings and translation rules
- Using leveled readers for this practice will:
 - Prevent the student from getting the number of practice opportunities needed
 - Include letter strings and translation rules for regular and irregular words students have not had an opportunity to learn - this becomes cognitively taxing on students (overload)

Path to Meaning: Pathway 2

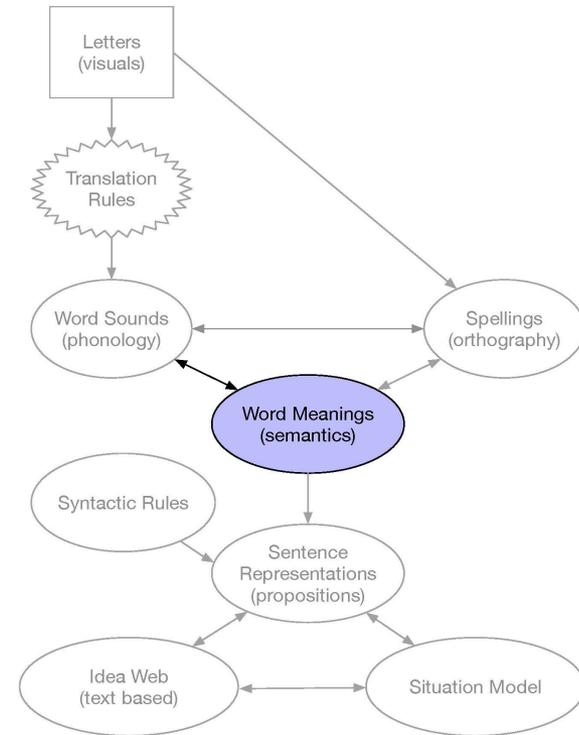
- “Wunce upawn uh tyme” - more challenging to read words like this that are phonetically correct but are not spelled correctly
- Spelling (orthography) of words makes a difference
- Creates a pathway that allows the reader to go right from print to meaning



Willingham, 2017

Word Meanings Represented in the Mind

- ***Breadth*** of vocabulary matters but it is only one aspect of the contributions word representations make to meaning
- Vocabulary **depth** is the other factor, which matters more because it implies your knowledge of words is not simple



Willingham, 2017

Activity 2.1

- **Based on the information presented thus far (role of spoken language, first pathway to meaning), identify 1-2 things that resonated with you.**
- **What are the implications for you, your colleagues, and / or the instructional approaches used to teaching children how to read?**

Vocabulary Knowledge and the Mind

- The mind is more precise than a dictionary because it avoids “lexical near misses” (Would you mind **spilling** water on my plants?)
- Words are organized in the mind and include connections based on the word attributes, category membership, and close semantic relationship
- More and more words are not packed into our mental dictionaries
- Instead, connections are made between the entries

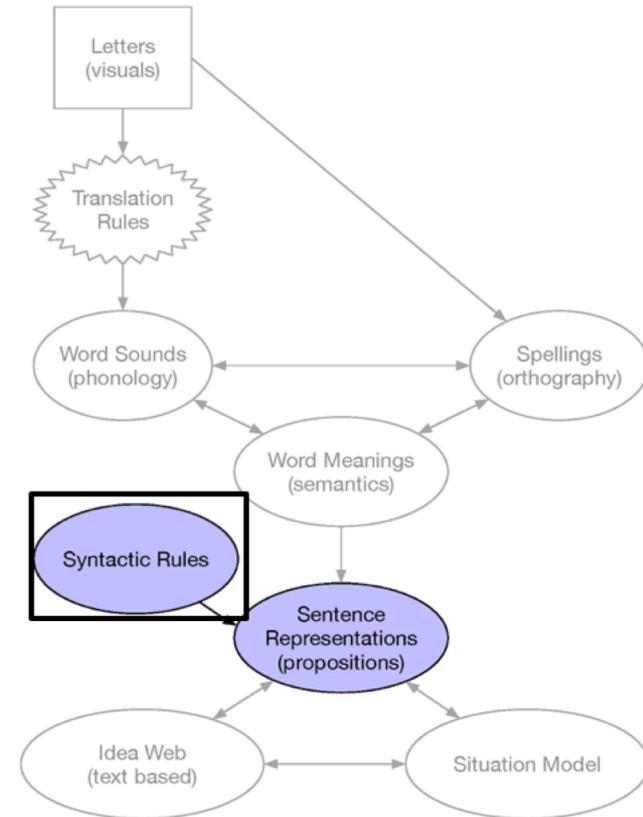
Breadth versus Depth

- Breadth:
 - Well-documented in the research that children with broader vocabularies comprehend what they read
 - Good evidence that teaching children new vocabulary words boosts reading comprehension (attributes, category membership, semantic relationship)
- Depth: Two different types
 - Density of the connections between the concept and other concepts
 - Speed with which you can access word information (activation spreads not only to the right words but does so quickly)

How are words put together so that we understand sentences and how we put together the meanings of multiple sentences?

Comprehension: Importance of Word Order

- Word order matters to our understanding of what we are reading
- Different arrangement of words make a difference
 - The cat is biting our dog.
 - The dog is biting our cat.
- Word order (plus other grammatical cues) dictate the syntactic role that each word plays



Willingham, 2017

Comprehension - Importance of Word Order

- Reader can use knowledge of previous sentences to make clear how the ambiguous sentence ought to be interpreted

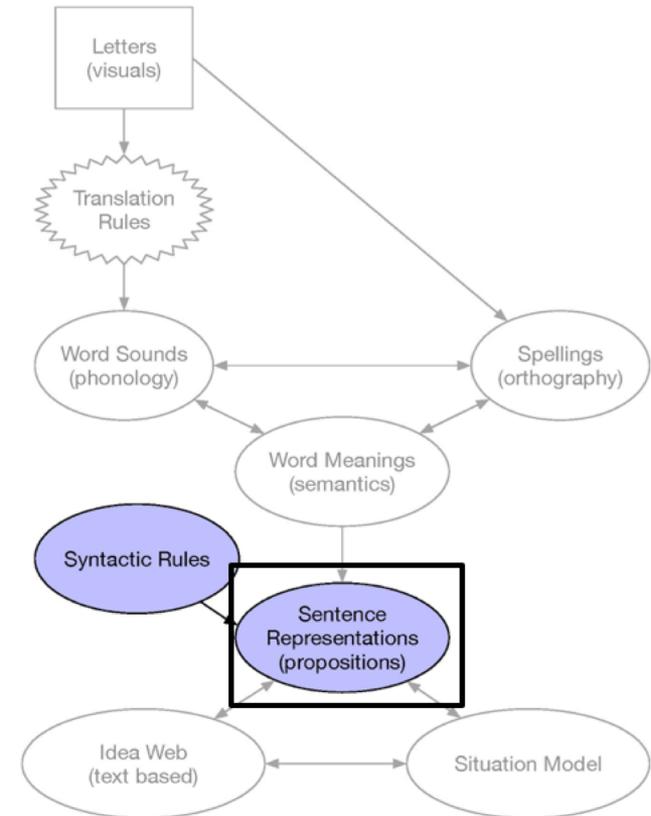
“They are cooking apples.”

What kind of applies did you buy?

They are cooking apples

What are Jill and Jeff doing in the kitchen?

They are cooking apples.



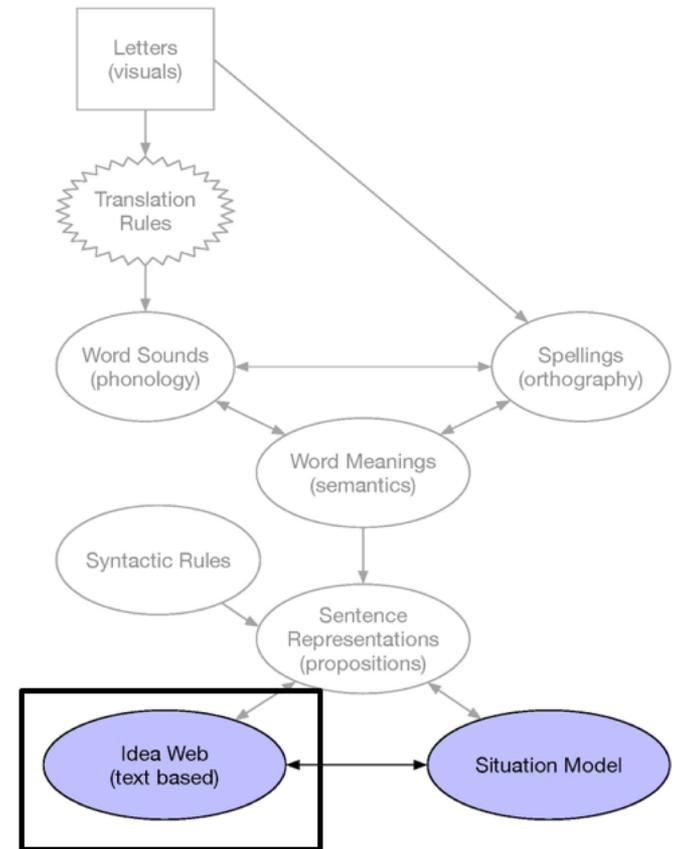
Willingham, 2017

Does comprehension amount to only extracting ideas from sentences? No, the ideas must be connected to one another. Connecting ideas to one another poses challenges to most readers.

Willingham, 2017

Comprehension: Connecting Ideas

- Idea web: As we read, we build an increasingly complex web of ideas that represents the text that was read
- Principles that guide the connecting of ideas:
 - Words, phrases that seem to mean the same thing, sentences that seem to go together
 - Causal connections
- If a reader lacks background knowledge, they will struggle to make connections



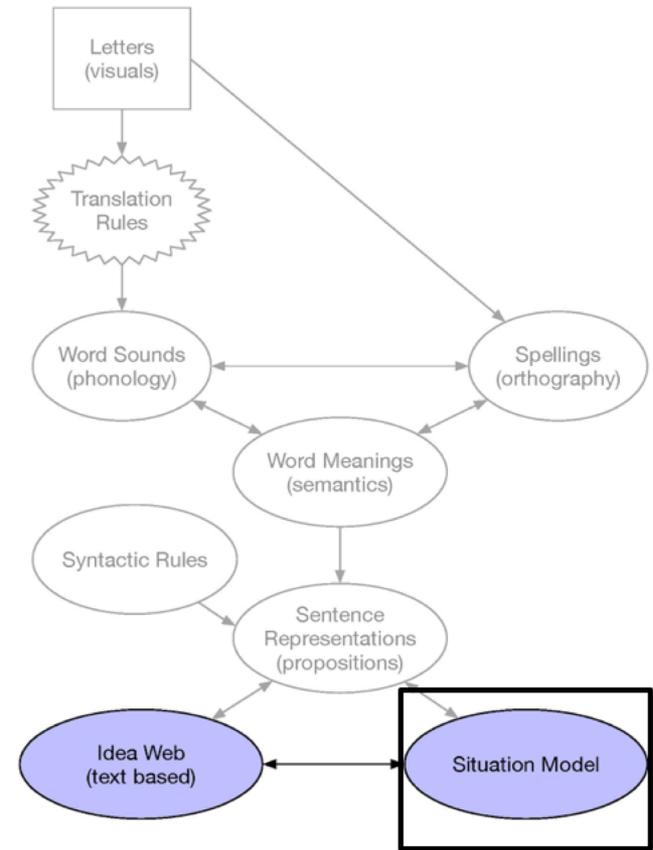
Willingham, 2017

“Writers omit a lot of information needed to make sense of what they write. They judge what readers need to know and what needs to be made explicit in the text, then they write accordingly.”

Willingham, 2017

Comprehension - Connecting Ideas

- Readers form an overarching memory of the text they read in addition to the idea web
- Situation Model: more abstract, less complete, but it highlights parts of the story that are important and omit less important details



Willingham, 2017

Situation Model (cont.)

- Ideas that are important enough to be included in the situation model depend on the reader's purpose for reading but readers
- Some things readers generally keep track of when they read:
 - What main characters are reading
 - Timing of events
 - Relationships amongst story elements
 - Casual relations among events in the text
 - Whether the events are relevant to the main character's goals

Willingham, 2017

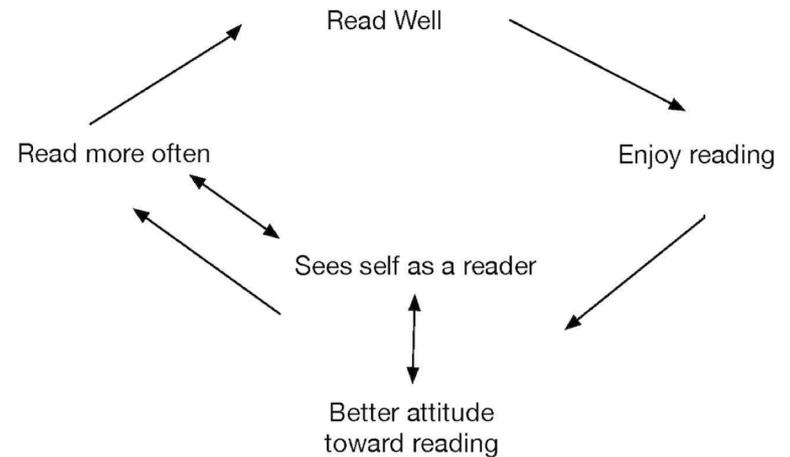
Teaching Comprehension Strategies

- Sizeable benefits to students
- Short-term intervention to teach the strategies is better than extensive practice with the strategies
- This finding makes sense because:
 - Comprehension is a bi-product of connecting ideas
 - Strategy instruction cannot tell a reader how to make those connections
 - Connections are specific to the meaning of the text

Willingham, 2017

Motivation and Attitudes Towards Reading

- “Read Well” describes the two-pathways to meaning and how we comprehend what is read
- Depth of word knowledge and background knowledge are built if we are motivated to read more and have a positive attitude towards reading



Willingham, 2017

Activity 2.2

- **Based on the information presented thus far (word meanings, understanding comprehension), identify 1 to 2 things that resonated with you.**
- **What are the implications for you, your colleagues, and / or the instructional approaches used to teaching children how understand what they read?**

Barrier 2: Curriculum materials and resources do not support scientifically valid-reading practices

Solutions to Barrier 2

- Conduct an audit of curriculum resources that are being used across grade levels for reading instruction and intervention
- Identify strengths and needs (access someone very knowledgeable in scientifically-valid reading practices to assist you)
- Determine what curriculum resources are needed and then engage in a thorough review process. If you need resources, access the “Review, Selection, De-selection Resources here: (continue to access someone very knowledgeable to assist you)

Barrier 3: Insufficient administrative support and monitoring to ensure curriculum resource materials that are supportive of scientifically-valid reading practices are being taught as intended on a daily basis

Solutions to Barrier 3

- Principals should participate in monthly data analysis meetings with grade level teams to help identify successes, barriers, and develop / refine a grade level Instructional Plan
- Principals communicate barriers and those barriers are placed in the district's Barrier Removal Process
- The district has developed guidelines for teaching Tier1, core reading curriculum materials (the “need to do’s” on a regular basis and the “need to use” for resources / manipulatives that are a part of the core reading, curriculum materials)

Solutions to Barrier 3 (cont.)

- Principals are very familiar with the guidelines for teaching core reading curriculum resources and visit classrooms to see implementation in action
- On-going professional learning is provided to teachers so they know how to use data to adjust their instruction and use of the reading curriculum resources

Barrier 4: Insufficient understanding of reading assessments and how to act on assessment data to inform instruction / intervention

Solutions to Barrier 4

- Provide professional learning and other implementation supports to school staff and leaders in how to administer, score, interpret assessment data
- Principals, Building Leadership Teams, coaches organize data to share with all staff on a regular basis:
 - Fall, winter spring universal screening data and findings from formal BLT data review sessions
 - Intervention Access and Effectiveness data (percent of students in the school who need intervention, percent of students that were able to receive intervention, percent of students receiving intervention whose progress monitoring data is at or above the aimline)

Solutions to Barrier 4 (cont.)

- School staff have opportunities to practice analyzing assessment data reports that are relevant to school staff given their role (e.g., grade level, interventionist) to determine the priorities for instruction and intervention

Barrier 5: Insufficient infrastructure (system) to support teachers in preventing and addressing reading difficulties across grade levels

Solutions to Barrier 5

- The Reading Tiered Fidelity Inventory's (R-TFI) emphasis is more proportionally geared towards systems, data analysis, and data-use
- Administer the R-TFI and access professional learning to address the concepts within the tool
 - You have two resources in the shared Google Folder that will help you determine the activities needed to improve the Tier 1 MTSS reading components:
 - “Elementary Tier 1 School and Classroom Installation Checklist”
 - ”Secondary Tier 1 School and Classroom Installation Checklist”

Thank You!

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